

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLICATION NO. 10/664,856
ATTORNEY DOCKET NO. Q76501

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph no. 0019 with the following amended paragraph:

The operational amplifier arrangement OAA depicted in Fig. 1 includes an input terminal IN, an output terminal OUT, and two pairs of supply terminals (not shown on Fig. 1). To this single-ended embodiment is provided an input voltage from a source V_{in} , for instance being the signal delivered by the D-A converter in ADSL applications. This input terminal is coupled to the respective input terminals of two amplifiers: a non-linear amplifier A2 and a linear amplifier A3. Such a non-linear amplifier may for instance consist of a class-B amplifier as indicated in Fig. 1. However, other types of non-linear amplifiers are possible such as switching mode amplifiers, class C or class D amplifiers. In general, a very power efficient amplifier will be chosen for this non-linear amplifier in this operational amplifier arrangement. For the linear amplifier A3, class A or AB amplifiers can be used. In a preferred embodiment, the non-linear amplifier power supply terminals are coupled to one pair of supply terminals of the operational amplifier arrangement, whereas the linear amplifier has power supply terminals which are coupled to the other pair of supply terminals of the operational amplifier arrangement. The supply voltage V_{A3} of the linear amplifier is thereby higher in amplitude than the supply voltage V_{A2} of the non-linear amplifier. A consequence of this is that high input signals will be clipping to the lower supply voltage levels of the non-linear amplifier, whereas these can yet be amplified nicely by the linear amplifier operating between supply rails of a higher voltage. However, in other embodiments both linear and non-linear amplifiers are operative between the highest supply voltage. Power efficiency of the arrangement is nevertheless improved for the preferred

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embodiment whereby the non-linear amplifier operates at a lower supply voltage than the linear amplifier.